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SPECIAL REPORT

NASA CONTRACT NSR 15-003-076

NASA CR-117175

INFORMATION RESOURCES AND SERVICES OF THE NASA REGIONAL DISSEMINATION CENTERS

# CAGEFILE

JOSEPH DISALVO Director

February 1, 1971



AEROSPACE RESEARCH APPLICATIONS CENTER

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Aerospace Research Applications Center
Indiana University Foundation
Bloomington, Indiana 47401

#### FOREWORD

The NASA Regional Dissemination Centers (RDC) have reached a state of maturity where a variety of technical information files, resources, and services are now available. The six RDC's have formed and informal association and network in recent years known as ACORDD. One outgrowth of ACORDD has been a pooling or sharing of resources such that an information center network now exists whereby the resources available to any one RDC are available to the entire network. This report briefly describes the nature of the resources and services available through the NASA RDC network.

Joseph DiSalvo

ACORDD Chairman, 1969-70

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# I. RDC ADDRESSES

#### I. RDC ADDRESSES

North Carolina Science & Technology Research Center Mr. Peter J. Chenery, Director Research Triangle Park, P.O. Box 12235, North Carolina 27709 Phone: (919) 549-8291 (Data phone 549-8491) TWX: 510-927-1804

Aerospace Research Application Center Dr. Joseph DiSalvo, Director Indiana Memorial Union Bloomington, Indiana 47401 Phone: (812) 337-7970 TWX: 810-351-1362

Knowledge Availability Systems Center
Mr. Edmond Howie, Director
University of Pittsburgh
Pittsburgh, Pennsylvania 15213
Phone: (412) 621-3500, Ext. 6352 - or 621-6877
TWX: 710-664-3060

Western Research Application Center Mr. A. Kendell Oulie, Director University of Southern California 809 W. 34th Street Los Angeles, California 90007 Phone: (213) 746-6132 TWX: 910-321-2981

New England Research Application Center Mr. Philip Wright, Director University of Connecticut Mansfield Professional Park Storrs, Connecticut 06268 Phone: (203) 429-5151
TWX: 710-440-0606

Technology Application Center Mr. William A. Shinnick, Director University of New Mexico Albuquerque, New Mexico 87106 Phone: (505) 277-4000 TWX: 910-989-1695

# II. INFORMATION FILES AND SERVICES AVAILABLE

THROUGH RDC NETWORK

TABLE II A

TABLE II B

# II A TABLE OF INFORMATION FILES

	l. File Descriptions	NERAC	NCSTRC	WESRAC	ARAC	KASC	TAC	COSMIC
a)	NASA(STAR & IAA files) -RSS -CA	X X	X X	X X				
.b)	USGRDR/DOD -RSS -CA		· X X					
c)	Chemical Abstracts Condensates -RSS -CA				A MAN AND THE STATE OF THE STAT	X X		
d)	Chemical Titles -CA		enskradeki ja spirativanska karaktura karaktura karaktura karaktura karaktura karaktura karaktura karaktura ka	errapticationals arraysemble production and array extension and array of the section array of the section and array of the section and array of the section array of the section and array of the section array of the section and array of the section	The same than th	Х		
e)	EI (Engineering Index) -RSS -CA		OF ALC STREET, COLUMN TO STREE		X X		Acousti, National Management of Acoustic Conference of Acoustic Conf	
f)	BIOSIS (Biological Abstracts -RSS -CA	A CONTRACTOR OF THE CONTRACTOR	*SA X					
g)	American Society for Metals -RSS -CA	X			And the second s		A designation of the control of the	
- And	IFI/PLENUM(Chem Patents) -RSS -CA	X			de la constitución de la constit	And extractable eight in instance and perfect in the land of the l	A CONTRACTOR OF THE PROPERTY O	AND THE RESIDENCE OF TH

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	l. File Descriptions	NERAC	NCSTRC	WESRAC	ARAC	KASC	TAC	COSMIC
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j)	ITT (Textile) - RSS	ŧ	X	AND THE PROPERTY OF THE PROPER				
k)	MIT (Textile) - RSS		x					
j)	ERIC (Education) - RSS - CA	-	X *SA					
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key: RSS - Retrospective Search SA - Special Arrangement CA - Current Awareness BI - Back Issues

\*\* - COSMIC also

II B TABLE OF OTHER SERVICES

	2. Other Services	NERAC	NCSTRC	WESRAC	ARAC	KASC	TAC	COSMIC
a)	SIP's EI - - BI - CA				X	AND THE PROPERTY OF THE PROPER		incl. Automotic control of the contr
<b>b)</b> 3	IAR's				X	A TOTAL OF ETHICAL PRINCIPLE AND A STATE OF THE PARTY OF		
c)	Market Information Service - CA				х		Market CO.C. States Section 100 Co.C. States S	
d)	Management Announce- ment Service - BI - CA	es proprieta de constitución de constitución de constitución de constitución de constitución de constitución de			X X	And the second s		
e)	Computer Information Service - BI - CA				X		AND SECTION OF THE PARTY CONTRACTOR OF THE PARTY CONTR	AND SECTION AND SE
f)	Computer Program Abstracts **				X		TOTAL OF THE SERVICES AND THE SERVICES.	X
g)	Documents		A THE RESIDENCE AND THE PROPERTY OF THE PROPER		Accounted and a contract of the contract of th			a de l'approprie de l
and the state of t	) Gemini/Apollo Photos	The second secon	A DATE OF THE PARTY OF T	Andread Control of Con	THE REPORT OF THE PROPERTY OF	understatische Gertrag in der der der Statten der Stat		

II B. TABLE OF OTHER SERVICES (cont'd)

9								
	2. Other Services	NERAC	NCSTRC	WESTAC	ARAC	KASC	TAC.	COSMIC
• p4	Product Searches						х	•
j)	Manual Searching	х					•	
<b>k)</b>	Reproduction				X			·
1)	Tech Briefs - RSS		X					
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key: RSS - Retrospective Search

CA - Current Awareness

SA - Special Arrangement BI - Back Issues

\*\* - COSMIC also

III. FILE DESCRIPTIONS

# WORLD TEXTILE ABSTRACTS FILE DESCRIPTION

World Textile Abstracts is a consolidation of world textile literature, as a result of collaboration among five textile research associations in England. It is expected that this file will grow at a rate of approximately 10,000 entries per year.

#### a) NASA (STAR & IAA) FILE DESCRIPTION

The NASA Information File, containing at present close to 420,000 documents, has been growing at a rate of approximately 70,000 per year since 1962. It is composed of only 16% NASA generated reports, the balance being reports, published and unpublished, collected from world-wide sources deemed pertinent to any phase of the aerospace program. Two journals abstract these varied articles and are published semi-monthly: International Aerospace Abstracts (IAA) and Scientific and Technical Aerospace Reports (STAR).

# b) USGRDR/DOD FILE DESCRIPTION

The U. S. Government Research and Development Reports are published by the National Technical Information Service. These files compile information from federal government sources including the Defense Documentation Center file (DDC).

The files are engineering or applications oriented, and cover earth sciences, engineering, clinical medicine, and military sciences. Annual accessions exceed 100,000 documents per year.

#### c) CHEMICAL ABSTRACTS CONDENSATES FILE DESCRIPTION

Chemical Abstracts Condensates tapes, prepared by the American Chemical Society, cover
the complete contents of Chemical Abstracts now
indexing over 250,000 entries annually.

Articles are selected from about 13,000 journals,
and there is also extensive patent coverage.

The file is updated on a weekly basis, and
services provided include coverage of all issues,
or coverage of only the odd issues, or only the
even issues.

#### d) CHEMICAL TITLES FILE DESCRIPTION

Chemical Titles is a biweekly journal and tape file from the American Chemical Society that reports the titles of selected papers recently published in current chemical journals. CT is designed to alert chemists and chemical engineers to current information appearing in approximately 700 of the world's chemically oriented journals. Each of the approximately 5000 titles appearing in an issue can be located through the Author Index, Keyword-in-Context Index, or the Bibliography. The latter lists the contents of the articles selected from each journal covered.

#### e) ENGINEERING INDEX FILE DESCRIPTION

Engineering Index, dating from January
1968 to the present is a monthly review of
over 3,500 technical journals published both
in the United States and abroad. The plastics
and electrical/electronics sections of the
index cover approximately 350 journals with
over 6000 plastics abstracts and 12,000
electrical/electronics abstracts annually.
Services were expanded in January 1970 to
contain all accessions abstracted in Engineering Index Monthly.

f) BIOLOGICAL ABSTRACTS: BIO SCIENCES INFORMATION SERVICE (BIOSIS)

Bio Sciences Information Service (BIOSIS) publishes three abstract journals (which cover some 7,400 life science journals): Biological Abstracts (BA), Bio Research Index (BioI), and Abstracts of Mycology (AM). Since these journals cover the entire life sciences area, there is some overlap with CAS, NASA, USGRDR, Bibliography of Agriculture and other technical publications. The machine searchable portion of the BIOSIS files consists of four separate The B.A.S.I.C. Index (subject), the indexes: CROSS Index (major subject categories), the Author Index, and Biosystematic Index (taxonomic), which may be used in satisfying a search request. The retrospective files go back to September of 1959 and contain some 1,250,000 references to abstracts. Eventually the files will go back to 1919, the beginning of Biological Abstracts.

#### g) AMERICAN SOCIETY FOR METALS FILE DESCRIPTION

Metals Abstracts is a joint venture of the American Society of Metals and England's Institute of Metals. It began publication in 1968 and is the successor to the ASM Review of Metal Literature and IM's Metallurgical Abstracts.

The ASM computerized file, dated from 1966, incorporates the contents of Metals Abstracts and the last two years of Review of Metal Literature. It contains approximately 100,000 references from more than 1,000 journals, and provides a comprehensive coverage of the world's literature on all aspects of the science and practice of metallurgy and related fields.

# h) IFI/PLENUM FILE DESCRIPTION

This service covers the chemical and related patents (U. S. and U. S. equivalent) from 1950 to the present.

#### i) ISI - ASCA IV FILE DESCRIPTION

This file, a product of the Institute for Scientific Information, is a by-product deriving from the production of Science Citation Index.

It contains the Tables of Contents of over 2,500 journals in practically every field of science and technology. In addition, the file contains the lists of references from each article in these journals, thus making possible a monitoring of who is citing what particular author or reference. Indexing is by permuted title (with left-and/or right-hand truncation of words permissible), author, journal, organization, cited author, cited book, cited reference, cited journal.

#### j) THE INSTITUTE OF TEXTILE TECHNOLOGY FILE DESCRIPTION

The Institute of Textile Technology File
now contains over 46,000 documents, dating from
January 1966 to the present. Abstracts are
taken from Textile Technology Digest, published
monthly with about 1000 abstracts in each issue.
About 70% of the coverage is journal literature;
about 30% is patent coverage. Journal and
patent coverage represent world-wide sources.
The file is updated as new tapes become available from the Institute.

k) THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY TEXTILE INFORMATION FILE DESCRIPTION

The Massachusetts Institute of Technology
Textile Information File, developed by
Professor Stanley Backer, contains approximately 11,000 documents. The M.I.T. file
covers the period 1950 through 1967, and is
a closed file (i.e., no further additions will
be made to this file). Abstracts have been
selected from The Journal of the Society of
Dyers and Colorists, and The Journal of the
Textile Institute, and include journal and
patent citations.

# 1) THE EDUCATIONAL RESOURCES INFORMATION CENTER FILE

The Educational Resources Information Center File is a project of the Department of Health, Education and Welfare and contains about 35,000 citations from the journal Research in Education since 1964. The file can be useful to researchers in the fields of education, sociology, psychology, and many fields of home economics. Most of the literature concerns research in the primary and secondary rather than higher education fields. The file is replete with education trends; psychological, educational and vocational testing; home and school environment of students; curriculum research; teaching techniques; etc.

# IV. SERVICE DESCRIPTIONS

# a) SIP's EI SERVICE

Standard Interest Profiles (SIP) are produced in approximately 130 subject areas. A SIP is very similar to a customized current awareness service except that engineers define the subject area and search strategy, and the output of the profile is sent to anyone who subscribes rather than to a single user.

The SIP's are put together from both the government and Engineering Index resources.

Generally, SIP's with numbers 0 through 99 are based on government literature sources and have two issues per month. SIP's 100 through 199 are based on Engineering Index and have only one issue per month. In some cases the same subject area is covered with two SIP's. For example, SIP-35, MICROWAVE SYSTEMS, based on government resources and SIP-135, MICROWAVE SYSTEMS, based on Engineering Index are available.

# b) IAR SERVICE

This service announces recent reports, chiefly from the government literature, which are judged to be of more than routine interest to industrial subscribers. Criteria for selection of these reports are that they be well written and that they present a concise, complete report on a topic of current interest to industry—in short, they are the "cream of the crop." Reports are selected from all technical disciplines and also occasion—ally from the management literature.

#### c) MARKET INFORMATION SERVICE

This service is designed to aid the marketing specialists and other managers concerned with marketing or distribution problems. Each month more than eighty journals and trade publications are reviewed. Engineers then select approximately ten articles for announcement. The articles are selected on criteria of pertinence, substance, and readability. Some of the topics discussed are market research, new product marketing, physical distribution, and marketing communications. Some articles on operations research are reported as well as articles in the general management field which may have broad appeal to marketing managers.

#### d) MANAGEMENT ANNOUNCEMENT SERVICE

This service is designed to announce quality management articles each month from the open and government literature. A monthly mailing, which covers a variety of different subject areas of interest to managers, consists of ten open literature abstracts and various management related no iffications which appear in the government abstract journals. Of the ten open literature articles, usually one or two are of a tutorial nature, while the remainder offer general current information. A greater part of the latter articles represent empirical studies of management subjects in the field or laboratory.

Presently, eighty-one periodicals in addition to the government literature are searched on a regular basis for this service. A complete list of these periodicals is available upon request.

#### e) COMPUTER INFORMATION SERVICE

The purpose of this service is to provide the user with access to recently developed computer software and research reports. The CIS draws its information and software from such agencies as NASA, AEC, DOD, and also their contractors. The software is announced by means of an abstract of each program. The abstract of the program explains what the program does and designates the programming language and the operating system for which the program was written. Programs are selected on the basis of the generality of the applications for which they can be used and on the completeness of documentation.

#### f) COMPUTER PROGRAM ABSTRACTS SERVICE

Computer Program Abstracts is an indexed journal listing documented computer programs on various topics developed on government contracts from the National Aeronautics and Space Administration, the Department of Defense, or the Atomic Energy Commission. It is published quarterly by NASA and is arranged in six sections. The first section contains program citations and abstracts arranged in thirty-four subject categories. Following are five indexes: subject, originating source, program number/ accession number, accession number/program number, and equipment requirements. Either documentation for the program or the program itself can be purchased. It is possible to search for a program on a particular topic.

#### fl) COSMIC

and dissemination outlet for computer programs and related information developed by NASA and its contractors. The Center receives, evaluates, and checks out the software, adding to its inventory those items which are operational and of potential value in a wide range of applications. Computer programs are passed on to users at considerable savings, the development cost having originally been borne by NASA.

New items are continually being added to the computer program inventory. By January 1971 nearly 1000 complete programs and documentation packages will be available.

Recently the Department of Defense joined NASA in this effort and agreed that computer software developed for DOD use will also be made available to industry through COSMIC.

# g) DOCUMENT SERVICE

Documents for all services offered are generally retrieved from inhouse Center files in microform, or from outside sources. A variety of reproductive services are available.

#### h) GEMINI/APOLLO PHOTO SERVICE

All available earth-oriented space photography from Gemini flights and Apollo 6, 7, and 9 flights is disseminated. These flights offer significant world-wide photographic coverage of the earth from about 39° North Latitude to about 30° South Latitude.

This photography has been edited and evaluated by researchers and classified according to geographic location, picture quality, and cloud cover. Approximately one-half of the available photography has application in one or more of the following fields: Geology\*; Hydrology\*; Oceanography\*; Meteorology\*; Geography\*; Land Use, Urban Studies, and Anthropology\*; Agriculture and Forestry, and Mineral Resources.

From this effort a Gemini Catalog of over 900 usable photographs and a catalog of over 1400 photographs from Apollo 6, 7, and 9 flights have been compiled and are available. Also available is a short listing of high altitude earth photographs from Apollo flights 8, 10, and 11.

For non-earth oriented space photography contact the National Space Science Data Center, Goddard Space Flight Center, Code 601, Greenbelt, Maryland 20771.

<sup>\*</sup>Disciplines in which a representative set of photographs has been assembled.

#### i) PRODUCT SEARCH SERVICE

Product searches in areas of high customer interest are available. Search titles include:

Ceramic and Metal Powder Characterization
Computers and Statistical Methods in Geology
Geothermal Phenomena
Hospital Administration
Hydrology
Integrated Circuit Technology (5 volumes)
Magnetic Recording Technology
Metal Carbide Technology
Oceanography
Quaternary Geology
Remote Sensing (3 volumes)
Water Pollution

# j) MANUAL SEARCHING SERVICE

Manual search augmentation of computer research is available. This searching generally utilizes student engineering talent, and local library holdings.

# k) REPRODUCTION SERVICE

Reproduction services generally available include xerox, offset printing, multilith, etc.

Other services can include collation, assembling, and binding. These services are provided in support of RDC activities.

#### 1) TECH BRIEF SERVICE

Tech Briefs are short announcements of new technology derived from the research and development activities of the National Aeronautics and Space Administration. These briefs emphasize information considered likely to be transferable across industrial, regional, or disciplinary lines and are issued to encourage commercial application.